## **DEPARTMENT OF THE ARMY**



SAVANNAH DISTRICT, CORPS OF ENGINEERS P.O. BOX 889 SAVANNAH, GEORGIA 31402-0889

Planning Division November 15, 2010

# **JOINT PUBLIC NOTICE**

US Army Corps of Engineers, Savannah District,
Post Office Box 889
Savannah, Georgia 31402-0889
and the
Georgia Department of Natural Resources
and the

South Carolina Department of Health and Environmental Control

# NOTE: THIS IS A US ARMY CORPS OF ENGINEERS CIVIL WORKS PROJECT

#### TO WHOM IT MAY CONCERN:

**SUBJECT:** Notice of Availability of a Draft Tier II Environmental Impact Statement (Draft EIS) and Draft General Reevaluation Report (Draft GRR) pursuant to the authority provided by Section 102(b)(9) of the 1999 Water Resources Development Act for improvements and continued maintenance of the existing Savannah Harbor Federal Navigation Project, Chatham County, Georgia and Jasper County, South Carolina.

The responsible lead agency is the Savannah District, US Army Corps of Engineers. The following agencies served as Cooperating Agencies in preparing the Draft EIS: Environmental Protection Agency - Region IV; National Oceanic and Atmospheric Administration (NOAA) Fisheries Service - Southeast Region; US Fish and Wildlife Service - Southeast Region; and the Georgia Ports Authority.

Notice of the following is hereby given:

- a. Pursuant to the relevant provisions of the laws and others as applicable:
  - 1. The Clean Water Act (33 U.S.C. 1251, et. seq.).
  - 2. The Endangered Species Act of 1973, as amended (16 U.S.C. 1531, et. seq.).
  - 3. The National Historic Preservation Act of 1966 (U.S.C. 470, et. seq.) and the Preservation of Historical Archeological Data Act of 1974 (16 U.S.C. 469, et. seq.).
  - 4. The National Environmental Policy Act of 1969 (42 U.S.C. 4321).
  - 5. Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1531, et. seq.).
  - 6. Magnuson-Stevens Fishery Conservation and Management Act, as amended (16 U.S.C. 1801, et. seq.).

- 7. The Marine Protection, Research, and Sanctuaries Act of 1972, as amended (33 USC 1413)
- b. The Savannah District, US Army Corps of Engineers has evaluated the engineering, environmental, and economic acceptability of various alternatives to address navigation problems in Savannah Harbor over a 50-year analysis period. The Draft Tier II EIS and Draft GRR document the results of the investigations and analyses that were conducted. The Savannah District is releasing these documents for public review and comment pursuant to the National Environmental Policy Act (NEPA) while the Department of the Army completes its review.
- c. Pursuant to Sections 401 and 404 of the Clean Water Act (33 USC 1344), and Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended (33 USC 1413), notice is hereby given that the Savannah District, US Army Corps of Engineers, is considering a proposal for expansion of the Savannah Harbor Navigation Project that includes discharge of fill into navigable waters of the US to construct and maintain submerged berms and nearshore berms, continued discharge of effluent from existing confined disposal facilities into waters of the US, and transportation of sediments dredged from the entrance channel (both new work and continued maintenance material) to the Savannah Ocean Dredged Material Disposal Site (ODMDS). The proposal also includes discharge of dredged material into navigable waters of the US for several mitigation features, including closing Rifle Cut, construction of a flow diversion structure and other modifications at McCoys Cut, deepening the upper portions of Middle and Back Rivers, removing the Tidegate and its abutments, construction of additional features including a submerged sill and berm at the mouth of Back River, a submerged sill at the mouth of Middle River, three dissolved oxygen systems, a fish passage structure at the New Savannah Bluff Lock and Dam, a boat ramp on Hutchinson Island, and restoration of Disposal Area 1S.
- d. The Savannah District announces the availability to the public of a Draft EIS and Draft GRR concerning the action. Copies of the Draft EIS and Draft GRR have been furnished to Federal, State, local, and other agencies of interest. Electronic copies of the Draft EIS and Draft GRR can be obtained from the following website: <a href="www.sas.usace.army.mil">www.sas.usace.army.mil</a>, and a limited number of hard copies are available upon email request to Mr. William Bailey at the following address: <a href="mailto:CESAS-PD@usace.army.mil">CESAS-PD@usace.army.mil</a>.
- e. A public workshop will be held during the comment period and is currently scheduled to occur December 15, 2010 at the Savannah Civic Center from 4:00 to 8:00 P.M. (subject to change). US Army Corps of Engineers officials will be available to answer questions, provide information, and accept written and dictated comments.
- f. Written statements regarding the Draft EIS and Draft GRR for the proposed action will be received at the Savannah District Office until

# 12 O'CLOCK NOON, DECEMBER 30, 2010

from those interested in the activity and whose interests may be affected by the proposed action.

#### **EXISTING PROJECT DESCRIPTION:**

Savannah Harbor is an approximately 32.5 mile Federal navigation project located along the Savannah River in southeast Georgia. The current Savannah Harbor Navigation Project has an authorized project depth of 30 feet Mean Lower Low Water (MLLW) in the inner harbor (Stations 112+000 to 105+000), 36 feet MLLW (Stations 105+000 to 103+000), 42 feet MLLW (Stations 103+000 to 0+000), 42 feet MLLW in the mouth of the entrance channel (Stations 0+000 to -14+000B), and 44 feet MLLW in the remainder of the entrance channel (Stations -14+000B to -60+000B). The current channel width is 600 feet across the ocean bar to the entrance channel (Stations -14+000B to -60+000B), 500 feet from the entrance channel to Kings Island Turning Basin (Stations -14+000B to 103+000, with the exception of 400 feet wide from Stations 58+000 to 59+000, 400 feet from the Kings Island Turning Basin to the Argyle Island Turning Basin, and 200 feet from the Argyle Turning Basin to the upstream limit of the authorized project. Rapid shoaling rates in the Federal navigation channel inhibit the ability to maintain the exact project depth (i.e., -42 feet MLLW) at all times; therefore, the project uses allowable overdepth and advance maintenance procedures to counteract the shoaling effects. The existing Federally-maintained navigation channel includes 2-feet allowable overdepth and up to 6-feet of advance maintenance. Savannah Harbor was last deepened between 1993 and 1994.

## DESCRIPTION OF PROPOSED PROJECT IMPROVEMENTS:

The alternative project depths being considered are 44-, 45-, 46-, 47-, and 48-feet within the inner harbor navigation channel. The deepening would follow existing channel side slopes. except in the bend wideners. For the entrance channel oceanward of the jetties, the proposed authorized depths would include the traditional 2-feet of additional depth to address wave effects in each alternative. The project would deepen a portion of the inner harbor from channel Stations 0+000 (near Fort Pulaski) to 103+000 (above the Kings Island Turning Basin), a distance of 103,000 river feet. The Entrance channel or ocean bar channel proposed for deepening begins at Station 0+000 and extends outward to a maximum length of approximately 98,000 feet. The length of the Entrance channel depends on the project depth, since the channel would extend oceanward until the channel depth matches the existing ocean depths. The maximum proposed project length is approximately 38 miles. The tentatively recommended plans are the 47- and 48-foot depth alternatives. The 47-foot depth alternative is the National Economic Development Plan, while the 48-foot alternative is the Maximum Authorized depth alternative. Overdepth dredging and advanced maintenance dredging remain the same as for the existing project and increase the final dredging depths beyond the stated authorized project depths. In addition, confined dredged material disposal areas would remain the same as for the existing project.

# **PROJECT IMPACTS:**

The Draft EIS assesses the potential impacts of the proposed project alternatives on endangered species, wetlands, fisheries, benthic communities, birds, marine mammals, water quality, air quality, environmental justice, historic properties, and potable surface and groundwater resources. The major impacts to biological resources were evaluated using calibrated

hydrodynamic and water quality models that predict changes to salinity and dissolved oxygen due to the proposed harbor deepening. These changes were then evaluated with respect to the species of concern and to resources of special significance, especially to wetlands within the Savannah National Wildlife Refuge (SNWR). The full description of potential environmental impacts and mitigation measures to avoid, minimize, or compensate for adverse environmental impacts associated with the proposed action are included in Section 5 of the Draft EIS.

- a. <u>Direct Impacts to Wetlands</u>. There would be direct adverse impacts to wetlands from dredging along the shoreline of the navigation channel at six locations, two of which are within the Savannah National Wildlife Refuge. Four areas are located on the west side of Hutchinson Island, in Georgia waters. One is located on the east side of Hutchinson Island along a portion of the Tidegate abutment in Georgia. The sixth site is located along a portion of the Tidegate abutment in South Carolina. The extent of the impacts would not differ substantially between channel depth alternatives. Of the maximum 30.0 acres affected by excavation, 14.08 acres could be considered wetlands. The other 15.92 acres are considered high ground. The Corps would mitigate for the direct impacts to these wetlands.
- b. <u>Indirect Impacts to Wetlands</u>. The proposed action would cause indirect adverse impacts to wetlands because deepening the channel would allow the tides to move further upstream, changing the salinity of those waters. Since tidal freshwater marshes were identified by the US Fish and Wildlife Service as the single most critical natural resource in the harbor, Savannah District focused on identifying project impacts to that resource. The other natural resource agencies concurred with this priority. The majority of the tidal freshwater marshes presently occur between the Houlihan Bridge (GA 25) and the I-95 Bridge. To avoid and minimize adverse environmental impacts to freshwater wetlands, the project would re-route flows in that area as described in the mitigation plan portion of the Draft EIS. To compensate for remaining adverse wetland impacts which vary by depth alternative up to a maximum of 337 acres for the 48-foot alternative, the project would acquire a maximum of 2,683 acres of lands as prioritized by the US Fish and Wildlife Service. Those lands would be added to the Savannah National Wildlife Refuge.
- c. Water Quality in the Savannah Harbor. The proposed action would adversely impact dissolved oxygen levels in the harbor if no mitigation were included. To address this potential impact, the Corps included dissolved oxygen systems in the mitigation plan of each depth alternative. The analyses indicate that oxygen injection is the most cost-effective means to raise dissolved oxygen levels in the harbor. Due to site-specific requirements, a land-based injection system of Speece Cones was identified as being the most effective solution. The City of Savannah expressed concerns during the Tier I phase of the project about whether additional harbor deepening would allow salinity to move upriver to the extent that chloride levels would increase to unacceptable levels at the City's water intake in Abercorn Creek. The Corps developed and used a chloride model to predict chloride concentrations at the City's water intake under three different flow conditions -- average river flows, a drought flow, and during a severe drought. The chloride model predicts minimal effects to chloride levels from harbor deepening or the mitigation plans on the City's water intake.
- d. <u>Sediment Quality</u>. Although the Tier I assessment did not identify any unacceptable adverse effects from the excavation, transportation, discharge, or management of the new work or Operations and Maintenance (O&M) sediments, additional sediment sampling was completed

in 2006 as part of the Tier II assessment. The results indicated that the only sediment contaminant of concern for the proposed harbor deepening is naturally-occurring cadmium found in Miocene clays that would be dredged and/or exposed during construction. To address potential adverse effects, the project would place the cadmium-laden sediments in confined dredged material disposal areas and cover them with sediments that do not exceed threshold values. The Corps will also sample and monitor cadmium levels in the confined dredged material disposal areas as described in the Sediment Quality Evaluation in the Draft EIS.

- e. <u>Confined Disposal Site Effluent Water Quality</u>. The Corps analyzed the expected effluent from the upper harbor confined dredged material disposal areas and found that the constituent requiring the greatest dilution for the new work sediments to meet Georgia Water Quality standards would be copper. This parameter would meet Georgia Water Quality standards at the edge of a mixing zone of about 84 feet in the Savannah River. The constituent requiring the greatest dilution in the lower harbor sediments was found to be ammonia. That parameter would meet South Carolina Water Quality standards at the edge of a mixing zone of about 180 feet in the Wright River. With respect to disposal of sediments in the ocean, no acute or chronic Water Quality criteria would be violated outside the required 4-hour mixing zone. No more than minimal adverse impacts were identified. See the Section 404(b)(1) Evaluation in the Draft EIS for more information.
- f. Fisheries Impacts. The Draft Tier II EIS analyses indicated that adverse affects would occur to Striped bass and Shortnose sturgeon if no mitigation were to occur. To offset striped bass habitat loss, the mitigation plan will supplement the budget of the Georgia Department of Natural Resources Striped bass recovery program to enable the State to stock more striped bass in the estuary. To offset habitat loss of Shortnose sturgeon, the mitigation plan will restore access to historic spawning areas through construction and operation of a fish passage structure at the New Savannah Bluff Lock and Dam and protect important juvenile habitat in the lower portion of Middle River.
- g. <u>Cultural Resources</u>. Cultural resources in Savannah Harbor include wrecks, harbor modifications, terrestrial sites, and miscellaneous artifacts. The Draft Tier II EIS reports on the potential impacts to known cultural resources and measures included in the project to safeguard those resources from adverse impact. The proposed project would mitigate adverse impacts to the ironclad CSS Georgia by performing archaeological data recovery, excavation, and curation.
- h. Threatened and Endangered Species. A Biological Assessment of Threatened and Endangered Species (BATES) has been performed. The BATES concludes that the proposed action "may affect, but is not likely to adversely affect" piping plover, wood stork, West Indian manatee, Right whale and Humpback whales, sea turtles, and Shortnose sturgeon that may be present within the area. The BATES includes conditions that would be followed to protect endangered species during construction and operation of the project.
- i. <u>Groundwater Impacts</u>. An extensive study of the subsurface geology along the harbor showed that the proposed action will have insignificant effects on the rate of downward saltwater intrusion into the Upper Floridan aquifer. The full results of the field work, groundwater modeling, and GIS analyses are described in Section 5 of the Engineering Appendix of the Draft GRR.

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j. <u>Other Effects</u>. No other potentially significant adverse impacts have been identified. Other effects are discussed in Section 5 of the Draft Tier II EIS.

# AUTHORIZATIONS REQUIRED FROM THE STATE OF GEORGIA:

Coastal Zone Consistency. This notice serves as a request to the Georgia Department of Natural Resources, Coastal Zone Management Program for a Coastal Zone Management consistency determination. Savannah District has evaluated the proposed project and believes it is consistent with the Georgia Coastal Zone Management Program to the maximum extent practicable. The State will review the proposed action and determine whether it concurs that the proposed project is consistent with the State's Coastal Zone Management Program to the maximum extent practicable. Any person who desires to comment or object to Georgia Coastal Zone Management Consistency Certification must do so in writing within 30 days of the date of this notice to the Federal Consistency Coordinator, Georgia Department of Natural Resources, Coastal Resources Division, Suite 300, One Conservation Way, Brunswick, Georgia 31520-8687 and state the reasons or basis for the objections.

Water Quality Certification. This notice serves as a request to the Georgia Department of Natural Resources, Environmental Protection Division for Section 401 Water Quality Certification. Section 404 of the Clean Water Act requires this public notice as part of the water quality certification process to authorize the excavation and placement of dredged material, and discharge of weir effluents to waters of the United States. The Georgia Department of Natural Resources, Environmental Protection Division, intends to certify this project at the end of the 45 days in accordance with the provisions of Section 401 of the Clean Water Act, which is required to conduct an activity in, or adjacent to, waters of the State of Georgia. Any person or agency who desires to comment, object, or request a public hearing relative to State Water Quality Certification must do so within 30 days of the State's receipt of this notice, in writing, and state the reasons/basis of objections, or request for a public hearing. Such comments should be submitted to the Georgia Department of Natural Resources, Environmental Protection Division, 205 Butler Street, SE., Suite 1252, Atlanta, Georgia 30334.

# AUTHORIZATION REQUIRED FROM THE STATE OF SOUTH CAROLINA:

Coastal Zone Consistency. This notice serves as a request to the South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management for a Coastal Zone Management consistency determination. Savannah District has evaluated the proposed project and believes it is consistent with the South Carolina Coastal Zone Management Program to the maximum extent practicable. The District will submit its evaluation to the South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management in Columbia, South Carolina, who administers the program. The State will review the proposed action and determine whether it concurs that the proposed project is consistent with the State's Coastal Zone Management Program to the maximum extent practicable. Any person who desires to comment or object to South Carolina Coastal Zone Management Consistency Certification must do so in writing within 45 days of the date of this notice to the South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management; 1362 McMillan Avenue, Suite 400, Charleston, South Carolina 29405 and state the reasons or basis for the objections.

Water Quality Certification. This notice serves as a request to the South Carolina Department of Health and Environmental Control for Section 401 Water Quality Certification and serves as a public notice on their behalf. Section 404 of the Clean Water Act requires this public notice as part of the water quality certification process to authorize the excavation and placement of dredged material, and discharge of weir effluents to waters of the United States. The South Carolina Department of Health and Environmental Control will review this project in accordance with the provisions of Section 401 of the Clean Water Act, which is required to conduct an activity in, or adjacent to, waters of the State of South Carolina. Any person or agency who desires to comment, object, or request a public hearing relative to State Water Quality Certification must do so within 60 days of the date of this notice, in writing, and state the reasons/basis of objections, or request for a public hearing to the South Carolina Department of Health and Environmental Control, Division of Water Quality, Bureau of Water, 2600 Bull Street, Columbia, South Carolina 29201-1708.

## **DEPARTMENT OF THE ARMY EVALUATION:**

<u>Environmental Impact Statement</u>. The Draft EIS documents the conclusions of studies on the potential impacts of construction and maintenance of this proposed project. This assessment includes an assessment of several alternatives and the potential environmental impacts. Savannah District announces the availability of this Draft EIS for public review and comment. The District is coordinating the document with interested parties while the Department of Army completes its review of this proposal.

**Evaluation Factors.** The decision whether to proceed with the project as proposed will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed action. That decision will reflect the national concern for both protection and use of important resources. The benefits that reasonably may be expected to accrue from the proposal will be balanced against the reasonably foreseeable detriments. All factors that may be relevant to the proposal will be considered, including the cumulative effects thereof. Among those are conservation, economics, general environmental concerns, navigation and, in general, the needs and welfare of the people. Individual assessments within the Draft EIS include the following:

- a. <u>Threatened and Endangered Species</u>. A Biological Assessment of Threatened and Endangered Species (BATES) has been prepared for this project and is included as an appendix to the Draft EIS. The District is coordinating this BATES with the US Fish and Wildlife Service and NOAA Fisheries Service, along with its determination that the project, as proposed with conditions, is not likely to adversely affect listed species.
- b. <u>Section 404 Evaluation</u>. A Section 404 Evaluation has been prepared in accordance with Section 404(b)(1) Guidelines of the Clean Water Act for the proposed discharges of dredged or fill material and weir effluent into waters of the United States. This evaluation is included in the Draft EIS. The Section 404 (b) (1) Evaluation concluded that the proposed discharges associated with this project comply with the Guidelines.
- c. Section 103 Evaluation. The suitability of dredged material for transport to and disposal into the approved ocean disposal site has been evaluated pursuant to Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972. This evaluation is included in the Draft EIS. The evaluation concluded that new work and Operation and Maintenance sediments from the proposed project are suitable for transport and disposal in the Savannah Harbor Ocean Dredged Material Disposal Site. This conclusion is being coordinated with EPA Region IV for their concurrence.
- d. <u>Cultural Resources</u>. Existing information was reviewed to identify known cultural resources that could potentially be impacted by the proposed project. Investigations were conducted to determine the impact on known significant sites. Additional surveys would be performed along the proposed bend wideners and proposed channel extension to confirm that significant cultural resources are not located in those areas. Additional surveys would be performed at the nearshore berm site and at the proposed sites for the submerged berms along the bar channel if those sites would be used. If a significant resource is identified, the District would make an assessment of measures to avoid or mitigate impacts to that resource. The results of

these additional evaluations would be coordinated with the Georgia State Historic Preservation Office.

<u>Public Hearing.</u> Any person who has an interest that may be affected by this proposed action may request a public hearing. The request must be submitted in writing to the Savannah District Commander, Colonel Jeffrey M. Hall, within the comment period of this notice, and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this action.

**Point of Contact.** If there are any questions concerning this public notice, please contact Mr. William G. Bailey, Chief, Planning Division at <a href="mailto:CESAS-PD@usace.army.mil">CESAS-PD@usace.army.mil</a>.

William G. Bailey

Chief, Planning Division

Savannah District

US Army Corps of Engineers

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